

Appl. No. : 09/593,587
Filed : June 13, 2000

AMENDMENTS TO THE CLAIMS:

Please amend Claims 1, 7, 9, 10, 14, 18, and 20-23 as follows:

1. **(Currently Amended)** A thermal interface comprising:
a first surface;
a second surface; and
a plurality of elongate fibers in contact with at least one of said first surface and said second surface, wherein at least some of said fibers have a cross sectional diameter of greater than zero microns and less than approximately 1 micron, and are bonded to a portion of other fibers having a cross sectional diameter of approximately 3-15 microns.
2. **(Canceled)**
3. **(Canceled)**
4. **(Original)** The thermal interface of Claim 1, wherein at least some of said fibers comprise multi-walled nanotubes.
5. **(Withdrawn)** The thermal interface of Claim 1, wherein said fibers extend from at least one side of a metal membrane.
6. **(Withdrawn)** The thermal interface of Claim 5, wherein said fibers extend from both sides of said metal membrane.
7. **(Currently Amended)** A method of making a thermal interface comprising attaching whiskers having a diameter of greater than zero microns and less than about 1 micron to tip portions of fibers having a diameter of greater than about 3 microns and less than about 15 microns.
8. **(Original)** The method of Claim 7, wherein the whiskers and the fibers both comprise carbon.
9. **(Currently Amended)** A method of transferring heat away from a heat source comprising:
transferring heat from said heat source to a first plurality of fibers having cross sectional diameters of greater than zero microns and less than about 1 micron;
transferring heat from said first plurality of fibers to a second plurality of fibers having cross sectional diameters of more than about 3 microns and less than about 15 microns; and
transferring heat from said second plurality of fibers to a heat sink.

Appl. No. : 09/593,587
Filed : June 13, 2000

10. **(Currently Amended)** A thermally conductive gasket comprising:

a plurality of fibers having first and second ends, said fibers being predominantly aligned and forming a sheet that extends in a direction substantially perpendicular to the plurality of fibers;

a material comprising a plurality of nanofibrils located predominantly proximate to said first ends, said material improving heat transfer from said first ends.

11. **(Canceled)**

12. **(Withdrawn)** The gasket of Claim 10, wherein said material comprises a material which has a melting point between approximately 30 degrees C and 100 degrees C.

13. **(Withdrawn)** The gasket of Claim 12, wherein said material comprises a material which has a melting point between approximately 40 degrees C and 70 degrees C.

14. **(Currently Amended)** A method of enhancing the performance of a thermally conductive gasket made from a plurality of predominantly aligned carbon fibers having diameters of more than approximately 3 microns and less than about 15 microns, said method comprising placing a plurality of nanofibrils having diameters of approximately 1 micron proximate to at least some tips of said predominantly aligned carbon fibers.

15. **(Original)** The method of Claim 14, wherein at least some of said nanofibrils comprise multi-walled nanotubes.

16. **(Canceled)**

17. **(Canceled)**

18. **(Currently Amended)** A material comprising a first plurality of fibers and a second plurality of fibers, wherein said first plurality of fibers are predominantly aligned and form a sheet that extends in a direction substantially perpendicular to the first plurality of fibers, wherein said first plurality of fibers have a first diameter of greater than zero micrometers and less than about 15 micrometers, wherein said second plurality of fibers have a second diameter substantially smaller than said first diameter, and wherein at least some of said second plurality of fibers are bonded to portions of at least some of said first plurality of fibers.

19. **(Canceled)**

20. **(Currently Amended)** A thermal interface comprising:

a first surface;

a second surface; and

a plurality of elongate fibers in contact with at least one of said first surface and said second surface, wherein at least some of said fibers have a cross sectional diameter of greater than zero microns and less than approximately 1 micron, and are bonded to a tip portion of other fibers having a cross sectional diameter of greater than approximately 3 microns and less than about 15 microns.

21. **(Currently Amended)** A material comprising a first plurality of fibers and a second plurality of fibers, wherein said first plurality of fibers comprise carbon have a first diameter of approximately 3-15 micrometers, wherein said second plurality of fibers comprise multi-walled nanotubes having a second diameter of greater than zero micrometers and less than about 1 micrometer, and wherein at least some of said second plurality of fibers are bonded to portions of at least some of said first plurality of fibers.

22. **(Currently Amended)** A material comprising a first plurality of fibers and a second plurality of fibers, wherein said first plurality of fibers comprise carbon fibers having a first diameter of less than about 15 micrometers and more than about 3 micrometers, wherein said second plurality of fibers comprises carbon nanotubes having a second diameter of greater than zero micrometers ~~substantially smaller than said first diameter~~ and less than about 1 micrometer, and wherein at least some of said second plurality of fibers are bonded to portions of at least some of said first plurality of fibers.

23. **(Currently Amended)** A thermally conductive gasket comprising:

a plurality of fibers having first and second ends, said fibers being predominantly aligned and have a diameter of more than about 3 microns and less than about 15 microns;

a material located predominantly proximate to said first ends, said material improving heat transfer with said first ends, wherein said material comprises a plurality of nanofibrils having a diameter of greater than zero microns and less than about 1 micron.